

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:

KOHLER THOMAS D.

DOWNS RACHLIN MARTIN PLLC 199 MAIN STREET,
P.O.BOX 190 BURLINGTON VT 05402-0190 USA

RECEIVED

OCT 20 2010

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing
(day/month/year) 13 OCTOBER 2010 (13.10.2010)Applicant's or agent's file reference
DOWNS, RACHLIN & MARTIN
13406-002WOU1

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US2010/025124International filing date
(day/month/year)
23 FEBRUARY 2010 (23.02.2010)

Applicant

MIRAMAR LABS, INC. et al

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.**Where?** Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 82 70**For more detailed instructions, see *PCT Applicant's Guide*, International Phase, paragraphs 9.004 . 9.011.**

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ **With regard to any protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:**
☐ the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.
☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. Following the expiration of 30 months from the priority date, these comments will also be made available to the public.

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90bis.1 and 90bis.3).

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the PCT Applicant's Guide, National Chapters.

Name and mailing address of the ISA/KR



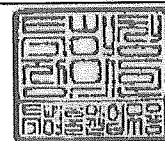
Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro,
Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

COMMISSIONER

Telephone No. 82-42-481-8752



*** Attention**

Copies of the documents cited in the international search report can be searched in the following Korean Intellectual Property Office English website for three months from the date of mailing of the international search report.

<http://www.kipo.go.kr/en/> => Patent Search => PCT-Service

ID : PCT international application number

PW : **6Y14LS54**

Inquiries related to PCT International Search Report or Written Opinion prepared by KIPO as an International Searching Authority can be answered not only by KIPO but also through IPKC (Intellectual Property Korea Center), located in Vienna, VA, which functions as a PCT Help Desk for PCT applicants.

Homepage: <http://www.ipkcenter.com>

Email: ipkc@ipkcenter.com

Phone: +1 703 388 1066

Fax: +1 703 388 1084

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 13406-002WOU1	FOR FURTHER ACTION <div style="text-align: right;">see Form PCT/ISA/220 as well as, where applicable, item 5 below.</div>	
International application No. PCT/US2010/025124	International filing date (<i>day/month/year</i>) 23 FEBRUARY 2010 (23.02.2010)	(Earliest) Priority Date (<i>day/month/year</i>) 23 FEBRUARY 2009 (23.02.2009)
Applicant MIRAMAR LABS, INC. et al		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

☒ the international application in the language in which it was filed

☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☒ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 4

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/025124

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 46-53
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 46-53 pertain to methods for treatment of human body by therapy and thus relate to a subject matter which this International Searching Authority is not required to search under Article 17(2)(a)(i) and Rule 39.1(iv) PCT.
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/025124**A. CLASSIFICATION OF SUBJECT MATTER***A61H 7/00(2006.01)i, A61M 1/00(2006.01)i, A61B 5/00(2006.01)i, A61B 5/04(2006.01)i, A61B 5/05(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61H 7/00; A61F 7/12; A61B 18/20; A61B 18/02; A61B 18/18; A61N 5/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: applicator, tissue, chamber, impermeable, membrane, vacuum, polyethylene film, hydrophobic film, locking means**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0269851 A1 (MARK E. DEEM et al.) 30 October 2008 See claim 1, paragraph [0082], figures 9, 12 and 20	1-45,54,55
A	US 2005-0251117 A1 (ROBERT S. ANDERSON et al.) 10 November 2005 See claims 1-8, paragraphs [0050]-[0052], figures 2a-4	1-45,54,55
A	US 6208903 B1 (WILLIAM F. RICHARDS et al.) 27 March 2001 See claim 1, abstract, figure 1	1-45,54,55
A	US 2006-0271028 A1 (GREGORY B. ALTSHULER et al.) 30 November 2006 See claims 1-3, abstract, figure 2	1-45,54,55
A	US 2004-0210214 A1 (EDWARD WELLS KNOWLTON) 21 October 2004 See claims 1, 2, 7, abstract, figure 1	1-45,54,55

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

12 OCTOBER 2010 (12.10.2010)

Date of mailing of the international search report

13 OCTOBER 2010 (13.10.2010)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seo-
gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JEON, CHANG IK

Telephone No. 82-42-481-8303



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/025124

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008-0269851 A1	30.10.2008	AU 2008-335715 A1	18.06.2009
		CN 101711134 A	19.05.2010
		EP 2142125 A1	13.01.2010
		EP 2142128 A1	13.01.2010
		EP 2142129 A2	13.01.2010
		JP 2010-524587 A	22.07.2010
		JP 2010-524589 A	22.07.2010
		JP 2010-524591 A	22.07.2010
		KR 10-2010-0105669 A	29.09.2010
		US 2008-269851 A1	30.10.2008
		WO 2008-131302 A2	30.10.2008
		WO 2008-131302 A3	30.12.2009
		WO 2008-131306 A1	30.10.2008
		WO 2009-075879 A1	18.06.2009
		WO 2009-075879 A8	18.06.2009
		WO 2009-075903 A1	18.06.2009
		WO 2009-075904 A1	18.06.2009
		WO 2009-128940 A1	22.10.2009
		WO 2010-047818 A1	29.04.2010
		WO 2010-096840 A2	26.08.2010
US 2005-0251117 A1	10.11.2005	CA 2602567 A1	16.11.2006
		EP 1742589 A2	17.01.2007
		EP 1883362 A2	06.02.2008
		JP 2008-539907 A	20.11.2008
		US 2005-0251118 A1	10.11.2005
		US 2006-0189964 A1	24.08.2006
		US 2007-0179482 A1	02.08.2007
		WO 2005-112807 A2	01.12.2005
		WO 2005-112807 A3	23.02.2006
		WO 2005-112807 A3	01.12.2005
		WO 2005-112815 A1	01.12.2005
		WO 2006-122136 A2	16.11.2006
		WO 2006-122136 A3	16.11.2006
		WO 2008-123951 A2	16.10.2008
		WO 2008-123951 A3	16.10.2008
US 6208903 B1	27.03.2001	AU 1996-63794 B2	28.09.2000
		AU 6379496 A	30.12.1996
		BR 9609398 A	14.12.1999
		CA 2223136 A1	19.12.1996
		EP 0956097 A1	17.11.1999
		EP 0956097 A1	20.08.2003
		JP 11-511043 A	28.09.1999
		MX 9709655 A	31.10.1998
		US 5769879 A1	23.06.1998
		WO 96-40369 A1	19.12.1996
US 2006-0271028 A1	30.11.2006	AU 2006-214028 A1	24.08.2006

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/025124

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		BR P10607903A2	20.10.2009
		CA 2597719 A1	24.08.2006
		CN 101132831 A	27.02.2008
		EP 1858588 A2	28.11.2007
		JP 2008-529746 T	07.08.2008
		US 2006-206103 A1	14.09.2006
		WO 2006-089227 A2	24.08.2006
		WO 2006-089227 A3	08.02.2007
US 2004-0210214 A1	21.10.2004	US 2004-0206365 A1	21.10.2004

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

KOHLER THOMAS D.

DOWNES RACHLIN MARTIN PLLC 199 MAIN STREET,
P.O.BOX 190 BURLINGTON VT 05402-0190 USA

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) 13 OCTOBER 2010 (13.10.2010)

Applicant's or agent's file reference
13406-002WOU1

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/US2010/025124

International filing date (day/month/year)

23 FEBRUARY 2010 (23.02.2010)

Priority date(day/month/year)

23 FEBRUARY 2009 (23.02.2009)

International Patent Classification (IPC) or both national classification and IPC

A61H 7/00(2006.01)i, A61M 1/00(2006.01)i, A61B 5/00(2006.01)i, A61B 5/04(2006.01)i, A61B 5/05(2006.01)i

Applicant

MIRAMAR LABS, INC. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR
Korean Intellectual Property Office
Government Complex-Daejeon, 139
Seonsa-ro, Seo-gu, Daejeon 302
-701, Republic of Korea
Facsimile No. 82-42-472-7140

Date of completion of this opinion

12 OCTOBER 2010 (12.10.2010)

Authorized officer

JEON, CHANG IK

Telephone No.82-42-481-8303



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2010/025124

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of :

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

2. ☒ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of:

a. a sequence listing filed or furnished

- ☐ on paper
- ☐ in electronic form

b. time of filing or furnishing

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2010/025124

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 46-53

because:

☒ the said international application, or the said claims Nos. 46-53

relate to the following subject matter which does not require an international search (*specify*):

The subject matter of claims 46-53 relates to a method of treatment by therapy (Rule 43bis.1(b), Rule 67.1(iv)).

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____ are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

☒ no international search report has been established for said claims Nos. 46-53

☐ a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

☐ furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

☐ furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

☐ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

☐ See Supplemental Box for further details.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2010/025124

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-45,54-55	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-45,54-55	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-45,54-55	YES
	Claims	NONE	NO

2. Citations and explanations :

1. Prior Art

Reference is made to the following documents:

D1: US 2008-0269851 A1 (MARK E. DEEM et al.) 30 October 2008
D2: US 2005-0251117 A1 (ROBERT S. ANDERSON et al.) 10 November 2005
D3: US 6208903 B1 (WILLIAM F. RICHARDS et al.) 27 March 2001
D4: US 2006-0271028 A1 (GREGORY B. ALTSHULER et al.) 30 November 2006
D5: US 2004-0210214 A1 (EDWARD WELLS KNOWLTON) 21 October 2004

2. Novelty and Inventive Step (PCT Articles 33(2) and 33(3))

2.1. Independent Claim 1

Document D1 is regarded as the closest prior art to the subject matter of claim 1. D1 discloses a system a system for the application of microwave energy to a tissue, comprising: a signal generator adapted to generate a microwave signal having predetermined characteristics; an applicator connected to the generator and adapted to apply microwave energy to tissue, the applicator comprising one or more microwave antennas and a tissue interface; a vacuum source connected to the tissue interface; a cooling source connected to said tissue interface; and a controller adapted to control the signal generator, the vacuum source, and the coolant source (see claim 1). However, none of D1-D5 disclose a liquid and gas impermeable membrane of claim 1. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 1 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

2.2. Dependent Claims 2-23, 54 and 55

Since claims 2-23, 54 and 55 are dependent on claim 1, claims 2-23, 54 and 55 are also considered to be novel and to involve an inventive step under PCT Article 33(2) and (3).

2.3. Independent Claim 24

None of D1-D5 disclose a polyethylene film having a thickness of about 0.0005 inches sealingly disposed across a treatment window between a tissue receiving chamber and a device receiving chamber to provide a bio-barrier there across of claim 24. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 24 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

2.4. Dependent Claims 25-27

Since claims 25-27 are dependent on claim 24, claims 25-27 are also considered to be novel and to involve an inventive step under PCT Article 33(2) and (3).

Continued on Supplemental Box

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2010/025124

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of :

Box V

2.5. Independent Claim 28

None of D1-D5 disclose first locking means and second locking means of claim 28. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 28 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

2.6. Dependent Claims 29-40

Since claims 29-40 are dependent on claim 28, claims 29-40 are also considered to be novel and to involve an inventive step under PCT Article 33(2) and (3).

2.7. Independent Claims 41 and 42

Claims 41 and 42 disclose all the technical feature of claims 1 and 28. Therefore, the subject matter of claims 41 and 42 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step because of the same reason applied to claims 1 or 28 cases.

2.8. Dependent Claims 43-45

Since claims 43-45 are dependent on claim 42, claims 43-45 are also considered to be novel and to involve an inventive step under PCT Article 33(2) and (3).

3. Industrial Applicability (PCT Article 33(4))

Claims 1-45, 54 and 55 of the present application meet the criteria set out in PCT Article 33(4), because the subject matter of claims 1-45, 54 and 55 is considered to be industrially applicable.